Marshall

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Dr. Walter Weyzen
Manager, Human Health Studies Program
Division of Biomedical &
Environmental Research
U. S. Department of Energy
Washington, DC 20545

Dear Dr. Weyzen:

Enclosed is an update on the Dose Reassessment study. This is for your information. Of interest to you is the availability of soil samples for Likiep. These samples will be analyzed for ^{129}I and ^{137}Cs. I have also requested Dr. Donaldson (University of Washington) to look into their logs for any information pertaining to their visit to Likiep in 1949. It seems that this atoll/island was chosen to represent background conditions.

Will certainly advice you on receipt of the above information. Thank you for your continued interest.

Yours truly,

Janakiram R. Naidu, Ph.D.
Ecologist

JRN/slg

Enclosure

cc: V. Bond
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Dose reassessment for populations on Rongelap and Utirik following exposure to fallout from the BRAVO incident (March 1, 1954).

1. Diet and Lifestyle Study: A preliminary report on the diet and lifestyle has been completed and is under review.

2. ^{129}I Study: Based on the results of the first set of samples analyzed for ^{129}I, it was decided that in the absence of additional soil samples from the period immediately following the test, samples from recent times could be analyzed for ^{129}I and ^{137}Cs. Such analyses will permit confirming the ratio of ^{129}I atoms to ^{137}Cs atoms already determined in soil samples collected during and immediately following fallout. In addition, samples from Likiep have also been submitted for ^{129}I analyses, especially in light of the fact that the Likiep population has shown incidences of thyroid nodules. Analysis of the soil samples from Likiep should help to ascertain the extent of fallout from the BRAVO test and compare with that estimated for Utirik.

3. Thyroid Gland: Efforts are being made to procure excised thyroid glands taken from the Marshallese residing in Rongelap and Utirik. These glands will be analyzed for ^{99}Tc which could provide us information on the concentrations of the short-lived iodine isotopes present at time of fallout and not seen today as a result of decay resulting from physical and biological losses.

4. Computer Simulation of Fallout Data: This study is expected to be completed by the end of September 1979, at which time the ^{129}I and ^{139}Cs data derived from the analyses of soil samples can be verified as of March 1, 1954. The recent Northern Marshall Islands Radiological Survey, which is expected to be completed soon, will provide by September 1979, isodose lines for the islands of Rongelap, Rongerik, Utirik and Likiep. These plots will serve to complement the Rand Model Isodose Lines as of March 1, 1954.

5. Plutonium Analyses of Teeth Samples: Dr. James McInroy (LASL) has started analyses of Marshallese teeth samples for Pu, U, Th and ^{90}Sr. This data will permit reinforcing the fallout data derived from ^{129}I and ^{137}Cs analyses of soil samples.

6. Literature Search and Information Gathering: This is ongoing and enclosed is a list of references that have been examined to date. Discussions with various scientific personnel associated with "Operation Castle" is being continued.